

ALEUTIAN ISLANDS MANAGEMENT AREA  
FOOD AND BAIT HERRING MANAGEMENT PLAN, 1998

By

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## INTRODUCTION

This document is intended to provide commercial herring fishers and buyers with management information and guidelines for participating in the Aleutian Islands Management Area food and bait herring fishery. This fishery is commonly referred to as the "Dutch Harbor" herring fishery.

The Aleutian Islands Herring Management Area is described as part of Management Area "M" and consists of Bering Sea waters extending west of Unimak Island and Pacific Ocean waters extending west of 163°30' W.long. (the south side of Unimak Island near Cape Lazaref) to the International Dateline (Figure 1).

In November 1991, the Alaska Board of Fisheries (BOF) enacted regulations which allow food and bait herring fishing only in the Aleutian Islands Herring Management Area. Further, the North and South Peninsula food and bait herring fisheries were reallocated to sac roe herring fisheries.

Historically the "Dutch Harbor" food and bait herring fishery has occurred annually from 1929 through 1938 and catches ranged from 513 tons to 2,510 tons (Table 1). The fishery was closed from 1939 through 1944 and again from 1946 through 1980. From 1981 through 1997, catches ranged from 704 tons to 3,578 tons. From 1990 through 1997, the duration of the fishery has averaged two days, with the 1997 fishery allocation being harvested in a five day period (Table 2). In recent years, the primary harvest locations have been in Unalaska and Makushin Bays in the Unalaska District (Figures 2-4).

The Alaska Department of Fish and Game (ADF&G) will manage this fishery according to the Bering Sea Herring Fishery Management Plan (5 AAC 27.060; ADF&G 1997). The following ADF&G local offices can be contacted for information on the "Dutch Harbor" food and bait herring fishery:

### **Sand Point:**

Alaska Department of Fish and Game  
P.O. Box 129  
Sand Point, AK 99661

Phone: (907) 383-2066  
Fax: (907) 383-2606  
Record: (907) 383-2334

VHF 6 & 72  
Single Side Band 3.230 MHz  
KWB 362

### **Dutch Harbor:**

Alaska Department of Fish and Game  
P.O. Box 920587  
Dutch Harbor, AK 99692

Phone: (907) 581-1239  
Fax: (907) 581-1572

VHF 9  
Single Side Band 4.125 MHz  
WIM 76

## MANAGEMENT PLAN

### *Registration Requirements for Fishing Vessels, Tenders, and Processors*

Each fishing vessel, tender operator, and buyer must register at the ADF&G office in Dutch Harbor prior to catching, tendering, buying, or processing herring. The buyer and tender reporting requirements are located in Appendix A. Permit holders are encouraged to check with their markets prior to fishing to determine which products are acceptable to the industry.

### *Fishing Periods*

The initial herring fishing period may occur as early as 12:00 noon on July 15 provided that the department is able to survey the area and significant herring biomass is available. A catch report from each CFEC permit holder and tender operator will be required after each fishing period, whether or not herring were taken, before the next fishing period will be announced. Generally, there will be a 12 hour closure between fishing periods to allow fishers the opportunity to deliver their catch and ADF&G time to assess the harvest. A shorter closed period may be allowed, if an agreement regarding the duration of the closure can be achieved between ADF&G and the fishers, and provided the department receive harvest reports promptly. If additional fishing time is needed to reach the harvest allocation, ADF&G personnel will remain flexible and make any inseason adjustments necessary to prosecute an orderly fishery.

From 1982 through 1991, an average of eight vessels participated in the "Dutch Harbor" food and bait herring fishery (Table 2). Since 1991, the average number of participants in this fishery has increased to about 16 vessels. However, in 1996 and 1997, 25 and 26 vessels participated in the fishery, respectively. Due to the increased effort in this fishery, stock assessment must occur prior to a fishery opening to prevent overexploitation. Stock assessment methods may include aerial surveys, if weather conditions are favorable and aircraft are available, and sonar surveys.

### *Catch Reporting*

If the "Dutch Harbor" food and bait fishery becomes difficult to manage due to late catch reporting or high gear levels, stringent inseason measures will be taken to prevent overharvest. Inseason management measures may include short fishing periods and frequent closures to assess harvest information.

Timely and accurate catch information provided by the fishers, tender operators, and processors is essential in managing this fishery. Fishers, tender operators, and processors are required to provide accurate catch information after each fishing period, even if no herring were caught or purchased. Permit holders must provide an accurate estimate of herring onboard the fishing vessel as well as an estimate of herring held within the seine or gillnet. Tender operators must provide accurate estimates of herring onboard their vessel. Processors must provide accurate estimates of delivered herring. Individual codes will be provided for each permit holder, tender, or processor that is involved in the fishery. Catch reporting instructions will be explained in detail during vessel and

processor registration. Failure to adhere to the reporting requirements specified on the tender and fishing vessel registration form will result in enforcement action.

### ***Fish Tickets***

Fishers must provide specific catch locations (statistical area or a specific landmark) to buyers, so that they can be recorded on fish tickets.

Fish tickets must be delivered, by mail or in person, to the Sand Point ADF&G office within ten days after the closure of the fishery. In addition, all fish tickets must be received in the Sand Point ADF&G office before leaving Management Area M. If ten days is insufficient time to submit fish tickets, then other arrangements may be possible by contacting ADF&G in Sand Point.

### ***Gillnet And Seine Specifications (5 AAC 27.631 and 5 AAC 27.632 in part)***

During the food and bait herring season there are no restrictions on gillnet length or depth. Purse seines are restricted to a maximum of 250 fathoms in length with no depth restrictions.

### ***Aircraft***

There is no restriction on the use of aircraft.

### ***Industry and ADF&G Cooperation***

Cooperation by fishers, tender operators, and processors will be appreciated when ADF&G personnel request herring samples from the commercial catch. These samples will be used to monitor age composition, which assists in determining the health of a stock and in forecasting next year's run strength. Fishers and spotter pilots are encouraged to provide herring biomass information to ADF&G personnel; these reports will remain confidential. Past cooperation has proven valuable in evaluating stock status and gaining management information.

### ***Test Fishing***

The department will conduct a test fishery in 1998. The test fishery will provide the department with valuable stock assessment information prior to commercial herring fishing periods. In addition, the test fish program will provide age, weight, and length samples of herring present in the Dutch Harbor area, and help pay for the associated costs of analyzing data and managing the fishery. The department will advertise for test fish vessels in late June and early July.

### ***Aleutian Islands "Dutch Harbor" Commercial Food and Bait Fishery***

The "Dutch Harbor" food and bait herring season is from 12:00 noon on July 15 through February 28. At the March 1991 BOF meeting, the Bering Sea Herring Fishery Management Plan was amended in regards to biomass threshold levels. The minimum threshold of herring estimated at Nelson Island was lowered to 2,000 short tons to allow the "Dutch Harbor" fishery to occur. The BOF instructed ADF&G to develop a threshold level for Port Clarence. If any Bering Sea herring stock is below its threshold, the "Dutch Harbor" food and bait fishery will be closed for that season. ADF&G will not be able to determine until late-June or early-July if the "Dutch Harbor" food and bait fishery will occur because biomass estimates for each Bering Sea herring stock must be made inseason during the spawning period. Currently, the biomass of all stocks are forecast above their respective threshold levels (DuBois and Hamner 1998). The Nelson Island District 1998 biomass forecast is 7,136 tons (C. Burkey, Alaska Department of Fish and Game, Bethel, personal communication). This is above the 2,000 ton threshold required to open the "Dutch Harbor" food and bait fishery. Therefore, the outlook for a 1998 "Dutch Harbor" food and bait fishery is favorable. However, processors and fishers are advised that management of the 1998 fishery will be based on the observed spawning biomass of each Bering Sea herring stock in 1998. ADF&G will update biomass estimates for each stock as herring move into coastal waters during spawning migrations.

Inseason emergency orders will be broadcast on the single side band radio frequencies 4.125 and 3.230 MHz and on VHF channel 12. Also, VHF channel 12 will be the designated channel for conducting all herring fishing communications which fishers will be required to monitor during openings.

When the 1998 herring harvest allocation is reached, ADF&G will close the entire Aleutian Islands Management Area for the remainder of the season.

### ***Gear Testing***

Prior to the opening of the fishery, herring purse seine gear can be tested during daylight hours until 9:00 p.m. July 14, 1998. After the fishery has been closed and all herring on the vessel have been offloaded, participants may set their net to straighten, clean, and organize their gear. Gear testing will only be allowed between Hog Island and Amaknak Island in view of the ADF&G Dutch Harbor office. Nets may only be stretched in a straight line and retrieved in the gear testing location. Permit holders must contact an ADF&G representative in Dutch Harbor on VHF channel 12 or in person prior to setting, after net retrieval, and must designate a specific set location. In addition, any fish caught during gear testing must be released unharmed immediately.

### ***Harvest Projection For The 1998 Fishery***

The department shall manage the "Dutch Harbor" food and bait herring fishery so that it is allocated seven percent of the allowable Togiak District sac roe herring harvest as determined under the provisions of the Bristol Bay Herring Management Plan (5 AAC 27.865). The estimated harvest allocation for the 1998 "Dutch Harbor" food and bait herring fishery is 1,590 tons

(Appendix B; K.A. Rowell, Alaska Department of Fish and Game, Anchorage, personal communication). This allocation is derived using the Bering Sea Herring Management Plan (5 AAC 27.060) and the preseason projected 1998 Togiak herring spawning biomass of 121,054 tons. The actual allocation will be established when the 1998 Togiak herring spawning biomass is determined.



## LITERATURE CITED

- ADF&G (Alaska Department of Fish and Game). 1997. 1997-98 Commercial herring fishing regulations, 1997 edition. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.
- DuBois, L., and H.H. Hamner. 1998. Pacific Herring Stocks and Fisheries in the Arctic-Yukon-Kuskokwim Region of the Bering Sea, Alaska, 1998. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A97-15, Anchorage.

Table 1. Aleutian Islands area "Dutch Harbor" food and bait herring fisheries historical summary, 1929-97.

Year	Harvest in Short Tons	Number of Processors	Number of Vessels Making Landings	Number Landings	Tons Per Boat	Tons Per Landing	Price Per Ton	Exvessel Value (Thousands)	Exvessel Value Per Vessel (Thousands)
1929	1,259				Information not Available				
1930	1,916				Information not Available				
1931	1,056	12	26		Information not Available				
1932	2,510	12	30		Information not Available				
1933	1,585	12	38		Information not Available				
1934	1,533	9			Information not Available				
1935	2,412	10			Information not Available				
1936	1,379	8			Information not Available				
1937	579				Information not Available				
1938	513				Information not Available				
1939-44	No Fishery								
1945	75				Information not Available				
1946-80	No Fishery								
1981	704	<sup>a</sup>	<sup>a</sup>	16	352	44	300	211	<sup>a</sup>
1982	3,565	6	7	95	509	38	300	1,020	146
1983	3,567	5	8	96	446	37	232	828	104
1984	3,578	5	9	61	398	59	210	751	83
1985	3,480	<sup>a</sup>	6	78	560	45	162	564	94
1986	2,394	4	7	53	342	45	254	600	86
1987	2,503	4	8 <sup>b</sup>	45	373	56	300	751	94
1988	2,004	6	8 <sup>b</sup>	59	251	34	252	505	63
1989	3,081	5	9 <sup>b</sup>	69	342	45	283	873	97
1990	820	5	7	8	117	103	350	287	41
1991	1,325	5	8	18	166	74	300	398	50
1992	1,949	5	11	26	177	75	300	573	52
1993	2,790	4	13	32	215	87	300	837	64
1994	3,348	7	14	65	239	52	300	1,005	72
1995	1,748	6	14	24	125	73	300	524	37
1996	2,239	6	24 (26) <sup>c</sup>	29	93	77	300	672	28
1997	1,950	5	26	63	75	31	300	585	23
1929-38									
Average	1,474	11	31		Information not Available				
1988-1997									
Average	2,126	5	13	39	180	65	299	626	53

<sup>a</sup> This information can not be released due to state confidentiality requirements.

<sup>b</sup> The catch by gear type can not be released due to state confidentiality requirements or is not available.

<sup>c</sup> CFEC permit holders making successful landings.

Table 2. Aleutian Islands area "Dutch Harbor" commercial food and bait herring fishery, including landing date, days fished, preseason Togiak spawning biomass, guideline harvest level, harvest, and number of vessels fishing, 1981-97.

Year	Landing Date		Days fished	Preseason Togiak Spawning Biomass	Harvest Quota Short	Food & Bait Harvest Short	% Togiak Spawning Biomass Harvested	Number Vessels Fishing
	First	Last		Short Tons	Tons	Tons		
1981	Aug 3	Aug 23	21	159,000	None	704	0.4	<sup>a</sup>
1982	Aug 5	Sep 12	39	98,000	None	3,565	3.6	7
1983	Jul 23	Sep 6	46	142,000	3,525 <sup>b</sup>	3,567	2.5	8
1984	Jul 17	Jul 27	11	115,000	3,525 <sup>b</sup>	3,578	3.1	9
1985	Jul 17	Aug 11	26	132,000	3,525 <sup>b</sup>	3,480	2.6	6
1986	Jul 16	Jul 28	13	96,000	2,453 <sup>c</sup>	2,394	2.5	7
1987	Jul 16	Jul 23	4 <sup>d</sup>	88,000	2,332 <sup>c</sup>	2,503	2.8	9
1988	Jul 16	Sep 18	21	132,000	3,100 <sup>e</sup>	2,004	1.6	8
1989	Jul 16	Aug 5	19 <sup>f</sup>	100,108	3,100 <sup>e</sup>	3,081	3.2	9
1990	Aug 15	Aug 15	<1	72,000	903 <sup>g</sup>	820	1.1	7
1991	Jul 17 <sup>g</sup>	Jul 17	<1	83,229	931 <sup>g</sup>	1,325	1.6	8
1992	Jul 16	Jul 28 <sup>h</sup>	5	60,214 <sup>i</sup>	1,940 <sup>j</sup>	1,949	1.3	11
1993	Jul 16	Jul 16	<1	164,135	2,193	2,790	1.7	13 <sup>k</sup>
1994	Jul 16	Jul 19	4	165,747 <sup>j</sup>	2,215 <sup>j</sup>	3,349	2.0	16 <sup>k</sup>
1995	Jul 16	Jul 16	<1	149,093	1,982	1,748	1.2	18 <sup>k</sup>
1996	Jul 16	Jul 16	<1	135,585	1,793	2,239	1.7	25 <sup>k</sup>
1997	Jul 15 <sup>l</sup>	19-Jul	5	125,000	1,645	1,950	1.2	26 <sup>k</sup>

<sup>a</sup> Number may not be released due to state confidentiality requirements.

<sup>b</sup> Harvest ceiling of 3,525 established by Alaska Board of Fisheries.

<sup>c</sup> Harvest quota set by ADF&G. Reduced proportionately with the drop from the 1985 Togiak spawning biomass level.

<sup>d</sup> Closed July 19 reopened for 14 hours on July 23.

<sup>e</sup> Harvest quota set under provisions of the Bering Sea Herring Fisheries Management Plan.

<sup>f</sup> Closed July 26, reopened July 27 through August 5.

<sup>g</sup> Fishery opened for six hours on July 16; weather prevented any fishing effort.

<sup>h</sup> Fishery co-op after July 16.

<sup>i</sup> The preseason forecasted biomass was adjusted by ADF&G, the final biomass estimate for Togiak was 146,037 tons and the harvest quota was adjusted to 1,940 tons.

<sup>j</sup> The preseason forecasted biomass was adjusted by ADF&G (Kathy Rowell, personal communication, May 25, 1994).

<sup>k</sup> Number of vessels registered to fish.

<sup>l</sup> Fishery opened at 10:00 p.m.

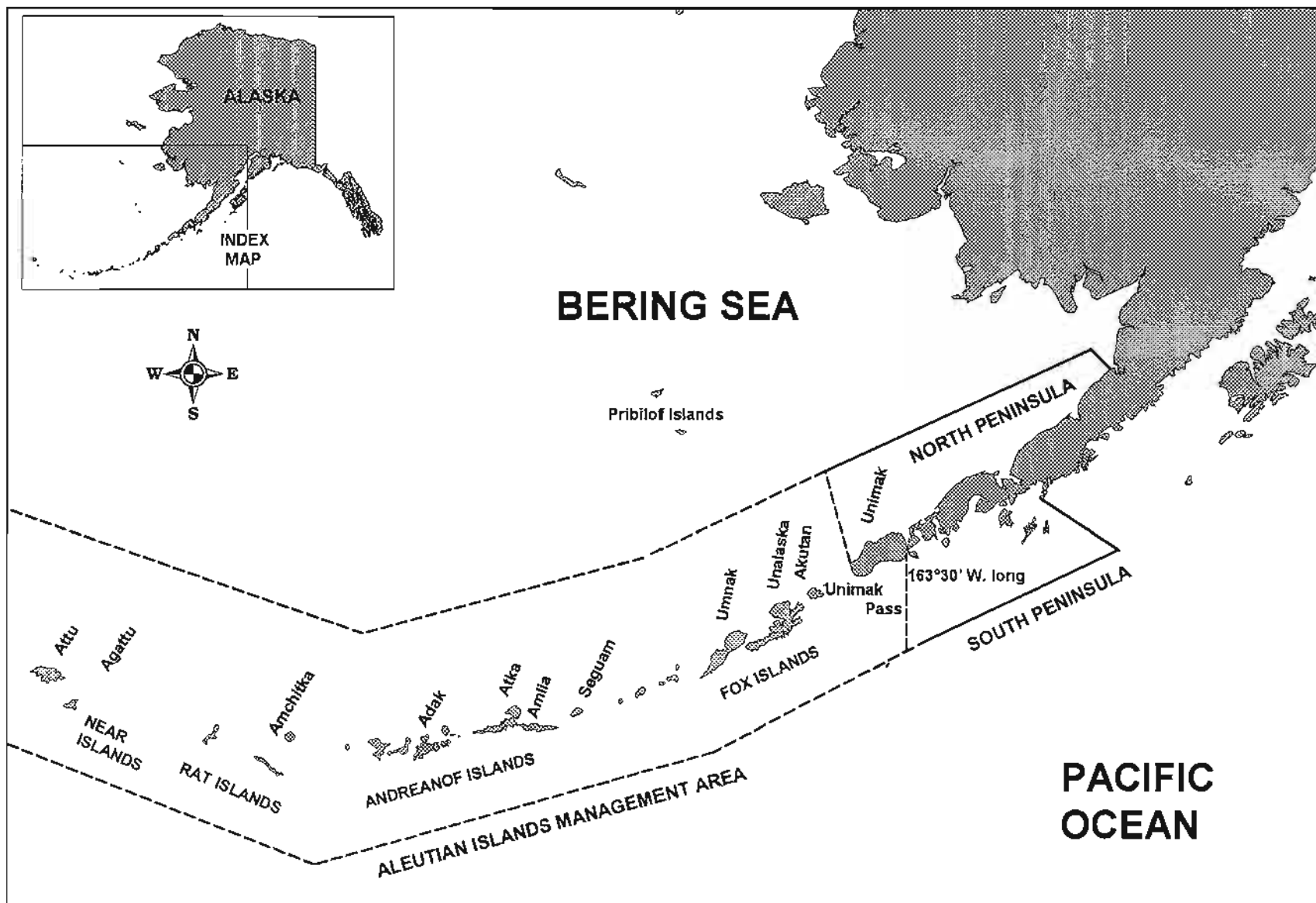


Figure 1. Map of Statistical Management Area M with the Aleutian Islands Herring Management Area defined.

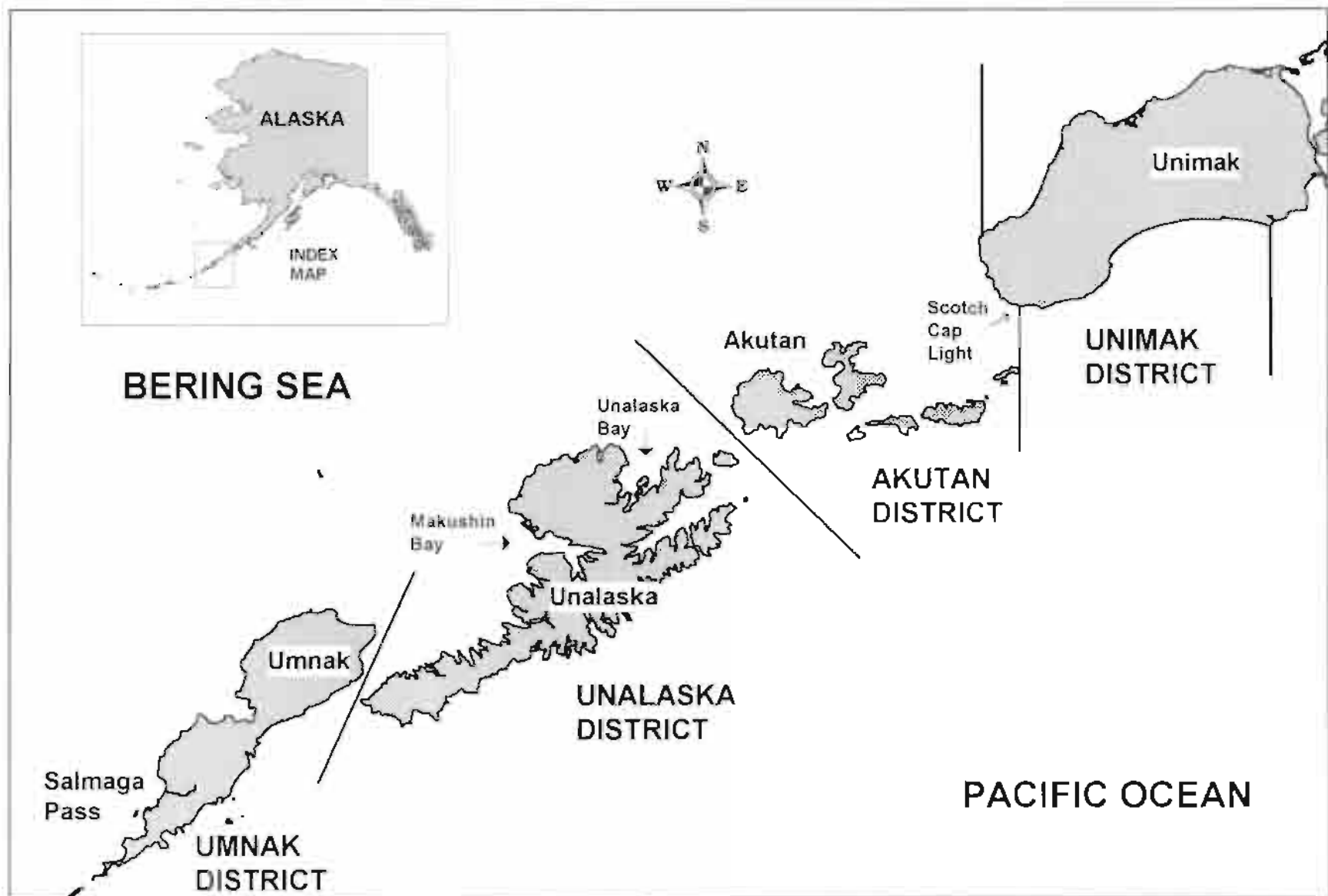


Figure 2. Map of the Aleutian Islands, "Dutch Harbor" Management Area, from Salmaga Pass to Unimak Island with the fishing districts shown

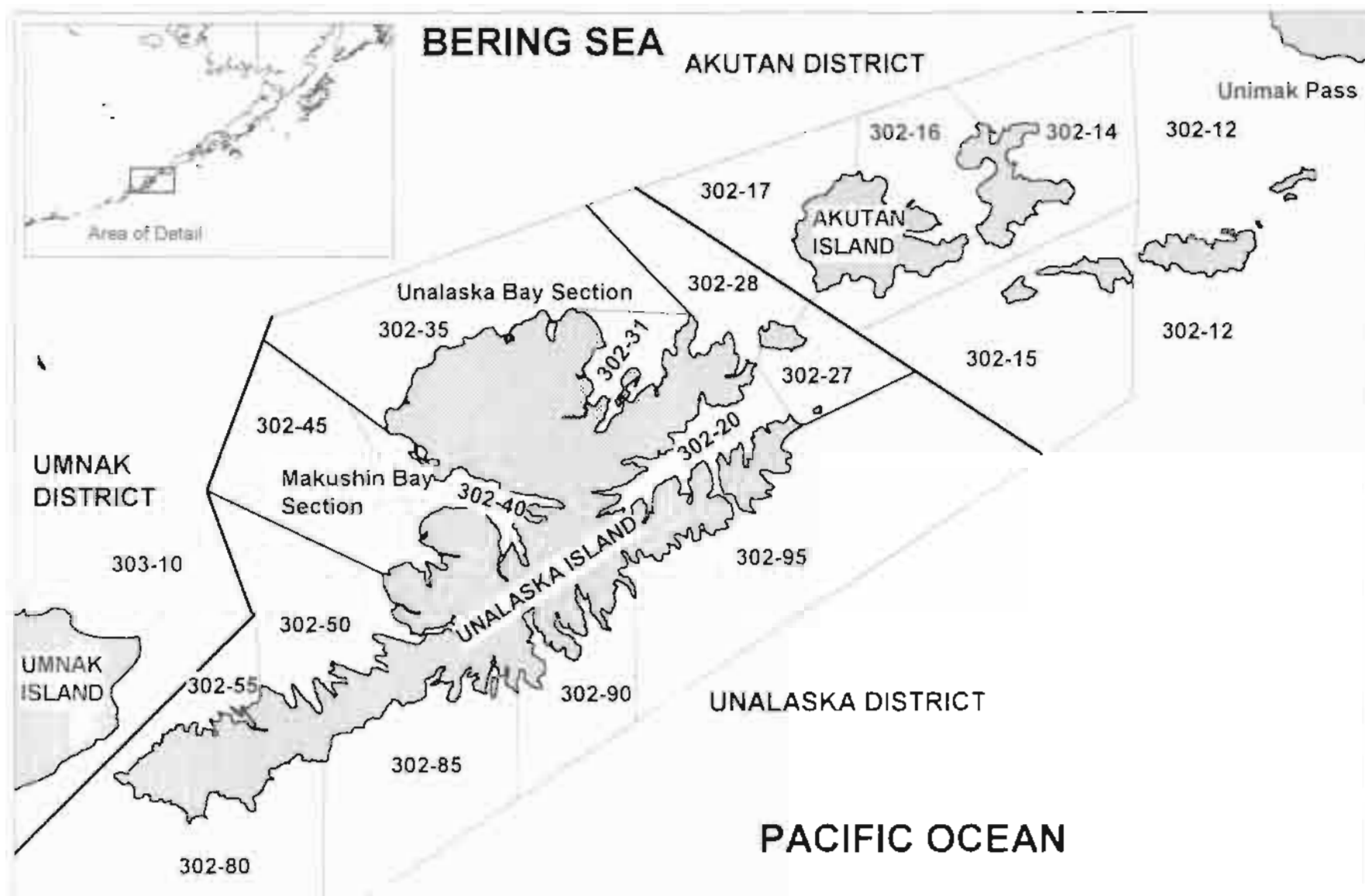


Figure 3 Map of Aleutian Islands Area from Tigalda Island to Umnak Island with the statistical herring fishing areas shown

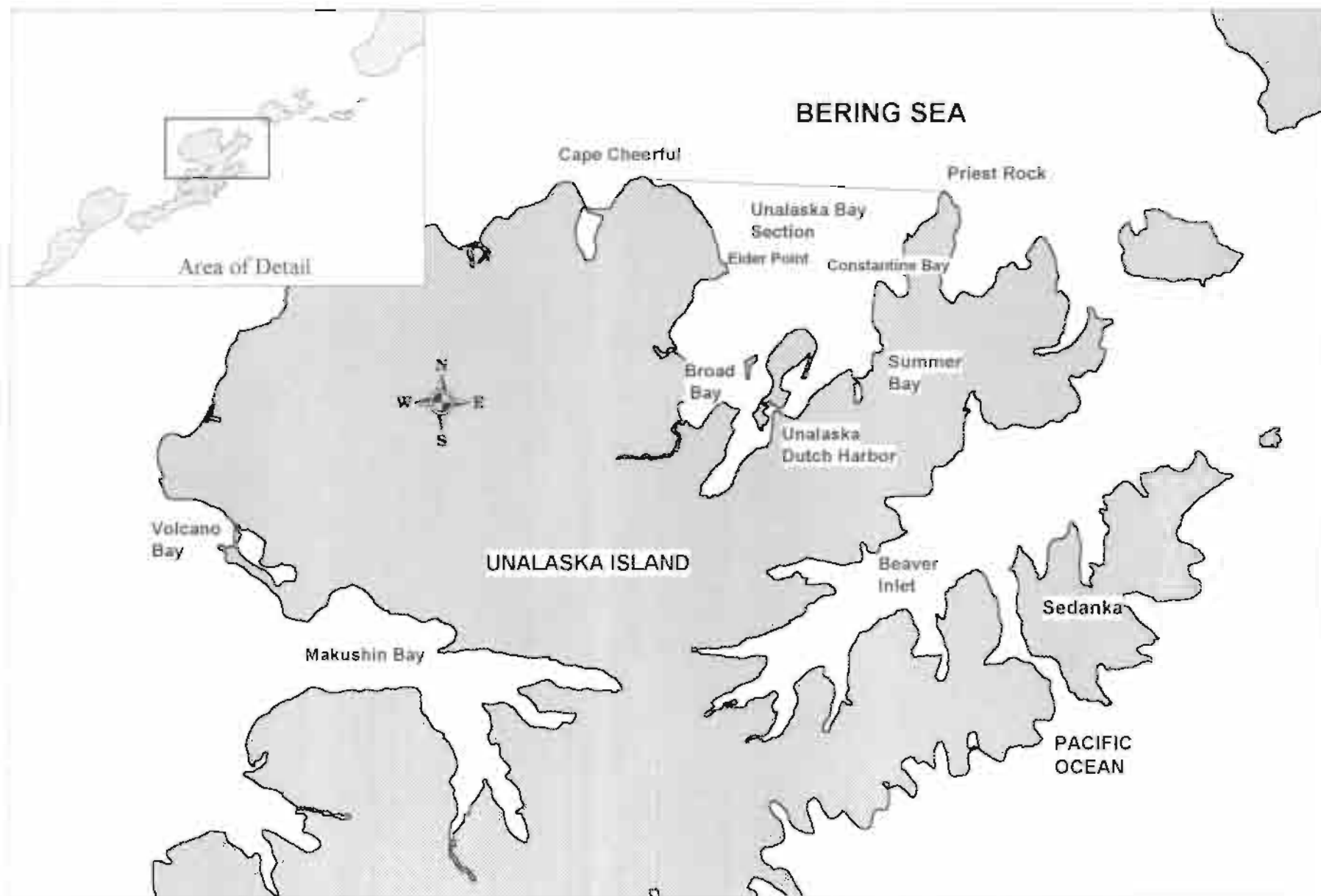


Figure 4 Map of Unalaska Island from Beaver Inlet to Volcano Bay

## **APPENDIX**



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**5 AAC 27.662 BUYER AND TENDER REPORTING REQUIREMENTS.**

In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

- (1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of the department located in the statistical area before transporting or processing of herring;
  - (2) make daily reports of all herring purchased from fishermen, and other processing records as specified by local representative of the department; and
  - (3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.
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APPENDIX B: Aleutian Islands “Dutch Harbor” food and bait herring forecast, 1998.

This forecast is for the “Dutch Harbor”: Unimak, Akutan, and Unalaska Districts and that portion of the Umnak District located east of Samalga Pass, food and bait herring fishery (Kathy Rowell, ADF&G, Anchorage, memo November 14,1997).

A 1,590 ton quota was allocated for the “Dutch Harbor” food and bait herring fishery for 1998 using the Bering Sea Herring Management Plan allocation formula, as follows, given the maximum 20% exploitation rate of the projected biomass:

	Biomass (Short Tons)	Harvest (Short Tons)
1998 Forecasted Biomass	121,054	
Exploitation @ maximum 20% for Total Allowable Harvest		24,211
Togiak Spawn-on Kelp Fishery (Fixed Allocation)		<u>1,500</u>
Remaining Allowable Harvest		22,711
<b>Dutch Harbor Food/Bait Allocation (7.0% of the remaining allocation)</b>		<u><b>1,590</b></u>
Remaining Allowable Harvest for Togiak District Sac Roe Fishery:		21,121

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